

## WHAT IS CLAIMED IS:

1. A composition comprising (a) a non-naturally occurring polypeptide having an amino acid sequence according to the formula X<sub>1</sub> H X<sub>2</sub> D G S F S D E M N T X<sub>3</sub> L D X<sub>4</sub> L A X<sub>5</sub> X<sub>6</sub> D F I N W L X<sub>7</sub> X<sub>8</sub> T K I T D X<sub>9</sub> (SEQ ID NO: 1) and (b) a pharmaceutically acceptable combination of (i) an isotonic agent, (ii) a buffer, and (iii) a preservative, a surfactant, or a combination of a surfactant and a preservative,

wherein (I) X<sub>1</sub> is NH<sub>2</sub>, DFPEEVAIVEELGRR (SEQ ID NO:2), DFPEEVTVIEELGRR (SEQ ID NO:3), DFPEEVNIVEELRRR (SEQ ID NO:4), or a fragment of any of SEQ ID NOS:2-4; X<sub>2</sub> is Ala or Gly; X<sub>3</sub> is Ile or Val; X<sub>4</sub> is Asn, Ser, or His; X<sub>5</sub> is Ala or Thr; X<sub>6</sub> is Arg or Lys; X<sub>7</sub> is Ile or Leu; X<sub>8</sub> is Gln or His; and X<sub>9</sub> is OH, Lys, Arg, Arg-Lys, Lys-Arg, Arg-Arg, or Lys-Lys and (II) the solubility of the peptide, stability of the peptide, or both is significantly greater than the solubility and/or stability of the peptide without the combination.

2. The composition of claim 1, wherein the composition comprises a preservative.

3. The composition of claim 2, wherein X<sub>2</sub> is Gly.

4. A method of promoting the treatment of small bowel syndrome, Crohn's disease, ileitis, intestinal inflammation, gastric ulceration, duodenal ulceration, inflammatory bowel disease, or intestinal cancer damage therapy in a patient comprising administering an effective amount of the composition of claim 2 to the patient.

5. A method of promoting the treatment of small bowel syndrome, Crohn's disease, ileitis, intestinal inflammation, gastric ulceration, duodenal ulceration, inflammatory bowel disease, or intestinal cancer damage therapy in a patient comprising administering an effective amount of the composition of claim 3 to the patient.

6. A non-naturally occurring peptide having an amino acid sequence according to the formula X<sub>1</sub> H X<sub>2</sub> D G S F S D E M N T X<sub>3</sub> L D X<sub>4</sub> L A X<sub>5</sub> X<sub>6</sub> D F I N W L X<sub>7</sub> X<sub>8</sub> T K I T D X<sub>9</sub> (SEQ ID NO: 1),

wherein X<sub>1</sub> is NH<sub>2</sub>, DFPEEVAIVEELGRR (SEQ ID NO:2), DFPEEVTVIEELGRR (SEQ ID NO:3), DFPEEVNIVEELRRR (SEQ ID NO:4), or a fragment of any of SEQ ID NOS:2-4; X<sub>2</sub> is Ala or Gly; X<sub>3</sub> is Ile or Val; X<sub>4</sub> is Asn, Ser, or His; X<sub>5</sub> is Ala or Thr; X<sub>6</sub> is Arg or Lys; X<sub>7</sub> is Ile or Leu; X<sub>8</sub> is Gln or His; and X<sub>9</sub> is OH, Lys, Arg, Arg-Lys, Lys-Arg, Arg-Arg, or Lys-Lys.

7. The non-naturally occurring peptide of claim 6, wherein X<sub>2</sub> is Gly.

8. A lyophilized composition comprising the non-naturally occurring peptide of claim 6.

9. A lyophilized composition comprising the non-naturally occurring peptide of claim 7.

10. A method of promoting the treatment of small bowel syndrome, Crohn's disease, ileitis, intestinal inflammation, gastric ulceration, duodenal ulceration, inflammatory bowel disease, or intestinal cancer damage therapy in a patient comprising administering an effective amount of the peptide of claim 6 to the patient.

11. A method of promoting the treatment of small bowel syndrome, Crohn's disease, ileitis, intestinal inflammation, gastric ulceration, duodenal ulceration, inflammatory bowel disease, or intestinal cancer damage therapy in a patient comprising administering an effective amount of the peptide of claim 7 to the patient.